

METHOD AND APPARATUS FOR PROCESSING MUNICIPAL WASTE

ABSTRACT OF THE INVENTION

A method for processing municipal waste substantially reduces the volume of material to be disposed into a landfill by increasing the volume of materials of value collected from the municipal waste and by composting the remaining materials to create a salable product. The process includes the removal of materials of value by magnetic devices to extract ferrous materials, by an air classifier to extract light plastic materials, by an eddy current mechanism to extract aluminum materials, and by a plastic sort mechanism to extract large plastic materials. Composting can be accomplished with a composting vessel that is located in the process either before the materials of value are removed or afterward. A grinding of the materials before a final screening allows the commercial grade compost to be separated from the materials that are to be sent to the landfill for final disposal. An alternative embodiment of the process utilizes a steam pressure vessel to disintegrate the waste material and to destroy any pathogens before materials of value are removed and the small and fine materials are composted. Large materials can be gasified to create heat energy for use in the steam pressure vessel.